

What is Claimed is:

1. A method for providing hierarchical decision fusion of recommender scores, said method comprising the steps of :

5 (a) providing a plurality of recommenders at a first level, said recommenders being grouped to at least one of a plurality of predetermined groups;

(b) providing a predetermined number of first level fusion centers for receiving an output from each of said recommenders from at least one particular group;

(c) outputting a decision by each one of said plurality of recommenders grouped in step (a) to a respective first level fusion center, wherein each decision provides a recommendation;

(d) each respective first level fusion center performing a first fusing step of the decisions output in step (c) by said recommenders from said at least one particular group;

15 (e) each respective first level fusion center outputting a first enhanced decision based on the fusion performed in step (d);

(f) providing a plurality of second level fusion centers for receiving the first enhanced decisions output from a group of said first level fusion centers;

(g) each respective second level fusion center performing a second fusing step of the first enhanced decisions received from the group of said first level fusion centers;

20 (h) each respective second level fusion center outputting a second enhanced decision; and

(i) outputting to a user a finally enhanced decision chosen from the enhanced decisions in step (h).

2. The method according to Claim 1, wherein the plurality of recommenders provided in step (a) have overlapping topics of interest.

3. The method according to Claim 2, wherein the user's profile contains a plurality of preferences previously recorded.

4. The method according to Claim 3, wherein the previously recorded preferences comprise one of a viewing history, listening history, and literary history.

5. The method according to Claim 1, wherein the first fusing step recited in step (d) is performed by one of weighted average, voting, neural network, and Dempster-Shaffer Evidential Reasoning.

6. The method according to Claim 1, wherein the second fusing step recited in step (g) is performed by one of weighted average, voting, neural network, and Dempster-Shaffer Evidential Reasoning.

7. The method according to Claim 1, wherein step (h) further comprises (i) providing a plurality of third level fusion centers for receiving the second enhanced decisions from the second level of fusion centers, and (ii) each of the plurality of third level fusion centers performing a third fusing step of a predetermined number of second enhanced decisions.

8. The method according to Claim 6, wherein step (h) further comprises (i) providing a plurality of third level fusion centers for receiving the second enhanced decisions from the second level of fusion centers, and (ii) each of the plurality of third level fusion centers performing a third fusing step of a predetermined number of second enhanced decisions.

9. The method according to Claim 7, wherein step (h) further comprises (iii) providing a single nth level fusion center, said nth level fusion center receiving decisions output from said second level of fusion centers; and (iv) providing an nth fusing step from the second enhanced decisions.

10. The method according to Claim 8, wherein step (h) further comprises (iii) providing a single nth level fusion center, said nth level fusion center receiving decisions output from said second level of fusion centers; and (iv) providing an nth fusing step from the second enhanced decisions.

11. The method according to Claim 9, wherein the nth level of fusion centers is a fourth level.

12. The method according to Claim 8, further comprising providing a single nth level fusion center, said nth level fusion center receiving decisions from a plurality of

n-1 level fusion centers, wherein said n-1 level fusion centers being a higher level than the third level of fusion centers.

13. The method according to Claim 11, wherein the nth fusion step is performed by one of weighted average, voting, neural network, and Dempster-Shaffer Evidential Reasoning.

14. The method according to Claim 11, wherein the finally enhanced step is output to the user via one of wire communication, wireless communication, fiber optics, LAN/WAN, and Internet.

15. A system for hierarchical decision fusion of recommender scores, said system comprising:

a central processing unit;

a memory in communication with said central processing unit;

a recommender module comprising fusion software for fusing recommendations of a predetermined number of groups;

means for outputting a recommendation to a user;

wherein said recommender module provides at least two levels of fusion, wherein a plurality of recommendations are fused at a first level to provide a plurality of first enhanced decisions, and said plurality of first enhanced decision are fused at a second level to provide a plurality of second enhanced decisions which are fewer in number than said first enhanced decisions.

16. The system according to Claim 15, wherein said memory further comprises means for storage of at least one of a viewing history, reading history and listening history.

17. The system according to Claim 15, wherein said means for outputting a recommendation to a user includes means for communication via one of wire communication, wireless communication, fiber optics, LAN/WAN and Internet.

18. The system according to Claim 15, wherein said central processing unit comprises a network server.

19. The system according to Claim 15, wherein said means for outputting a recommendation to a user includes a display.

20. The system according to Claim 15, wherein said system includes means for storing a cookie on a user's storage device, said cookie containing an identifier of a user profile in said memory.

21. The system according to Claim 19, wherein the display resides in a remote control.